



PRESENTS

International Symposium

2014 Symposium on “Evapotranspiration: Challenges in Measurement and Modeling from Leaf to the Landscape Scale And Beyond”

Call for Technical Abstract Proposals Submit by August 15, 2013

Special Session Proposals must be submitted by:
May 31, 2013.

Date of the Symposium
April 7-11, 2014

Raleigh, North Carolina, U.S.A.
www.asabe.org

WHO SHOULD ATTEND: Scientists, researchers, engineers, land and water managers, planners, statisticians/data mining experts, students and public officials are expected and strongly encouraged to attend this symposium. The symposium organizers especially encourage participation from international experts on evapotranspiration and water use.





For those wishing to present a paper — read all information listed below. Submit your abstract to <http://et2014.abstractcentral.com/> Paper proposals must be received by August 15, 2013 to be considered for the program.

SPONSORED BY:

The American Society of Agricultural and Biological Engineers (ASABE), Weyerhaeuser Company, and USDA Forest Service

ENDORSEMENTS: North Carolina State University, NC; University of Nebraska-Lincoln, Institute of Agriculture and Natural Resources, NE ; USDA-Agricultural Research Service, TX; US Geological Survey, FL; US DOI Bureau of Land Management, National Operations Center, CO; Oak Ridge National Laboratory, TN; University of North Georgia, GA; University of Georgia, GA; Clemson University, SC; College of Charleston, SC; University of Florida, FL; American Water Resources Association (AWRA); Colorado Division of Water Resources, CO; Embrapa Meio Ambiente, Brazil; Beijing Forestry University, China; Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (CAS); Macquarie University, Australia; University of Lille 1, France; University of Padova, Italy; ASCE-EWRI ET Technical Committee, and Nanjing University, China.

PURPOSE: To bring together all those interested in understanding, measuring, and modeling ET to report on advances in basic science, technology, applied methods, ecological, and socio-economic implications of ET processes and changes at all scales.

ABSTRACT SUBMISSION: An abstract is indicative of final paper quality, therefore, authors are urged to prepare well-written, clear, informative abstracts describing current work. The abstract should be approximately 200-300 words, single-spaced, and must emphasize objectives and results (2,000 characters maximum). Inclusion of tentative or final conclusions strengthen paper proposals and abstracts. Each abstract should include key words related to the conference topics.

ADDITIONAL NOTES TO AUTHORS:

1. All accepted/presented abstract proceedings will be published and distributed at the Symposium.
2. The official language of the conference will be English.
3. Abstracts must be submitted to <http://et2014.abstractcentral.com>

PROGRAM DEADLINES:

Paper proposals and abstracts deadline Aug. 15, 2013
Special session proposal May 31, 2013

SPECIAL SESSIONS:

"ET from Pine and pine intercropped with switchgrass and switchgrass only sites in North Carolina, Alabama, and Mississippi and a NEBFLUX switchgrass site in Nebraska."

WORKSHOPS:

- 1) Tentative Schedule Sat/Sun April 05-06: "ET Mapping with Thermal Remote Sensing Approaches" by Dr. Prasanna Gowda, USDA-ARS.
- 2) TBD: ASABE ET Standards Committee Workshop

ADDITIONAL PROPOSALS SOLICITED:

Proposals for other ET related special sessions not covered above are solicited from those who are interested in organizing such sessions. Session proposals must be submitted by May 31, 2013

SUGGESTED TOPIC AREAS:

1. ET processes, biophysical controls, and feedback mechanisms.
2. Measurement and Estimation Techniques: in-Situ and Remote Sensing
 - a. Ground-based technology (eddy covariance, soil moisture scintillometer, surface renewal, Bowen ratio energy balance system, sap flow, lysimeters, isotopic characterization of stem water and soil pools, watershed water balance etc.)
 - b. Remote sensing
 - c. Hybrid approach
 - d. ET measurement systems: Limitations and solutions, novel approaches
3. Estimates and Mathematical Modeling of ET
 - a. Assessment of various PET and REF-ET models
 - b. Modeling ET with limited weather and vegetation data
 - c. Incorporation of ET information into hydrologic, climatic, and terrestrial ecosystem models
 - d. Sensitivity of hydrologic model outputs to ET calculation
 - e. Scaling issues, uncertainty, error estimates and methodology
4. Advances in Thermal Remote Sensing-based ET mapping
5. Database Availability and Use
 - a. ET and related databases for various plant species
 - b. Crop Coefficients and Their Transferability
 - c. ET databases for eco-hydrological model validation
 - d. Global data comparisons
6. Practical Applications of ET in emerging research and environmental issues
 - a. Climate change, ET processes, and their interactions
 - b. Impacts of land use change (afforestation, deforestation, bioenergy crops, etc.) and invasive species on ET, water use and availability
 - c. Energy Balance, Ecosystem Productivity, Carbon Sequestration in different ecosystems: Their limitations and solutions
 - d. Regional and global vegetation-climate hydrology interactions (climate feedbacks, surface and subsurface runoff)
 - e. Data assimilations and applications to improve ET estimates
7. Climate Change and its impacts on ET and water resources
 - a. Socioeconomic issues and policies
 - b. Case studies from various regions (Australia, Brazil, China, India, Mediterranean Europe, and Southeastern and Southwestern US)
 - c. Gaps, limitations, and opportunities in regional research

For conference information contact:

Dr. Devendra Amatya, Conference Co-Chair,
USDA Forest Service; Voice: 843-336-5612;
Email: damatya@fs.fed.us

Dr. Jami Nettles, Conference Co-Chair,
Weyerhaeuser Company; Voice: 1-662-245-5226;
Email: jami.nettles@weyerhaeuser.com

For other information, contact:
Sharon McKnight, ASABE Meetings Manager
Voice: 269-932-7033; Email: mcknight@asabe.org





Paper proposals must be received by August 15, 2013

BACKGROUND: Evapotranspiration (ET), is a major component of the hydrologic cycle with direct impacts on water quantity, water quality, and net ecosystem and agro-ecosystem primary productivity. Increasing human population and climate change are putting pressure on global water resources, both in direct demand and in ecosystem services. Land use change is necessary to supply more food, fiber, forest products, and bioenergy, but water resources must be able to sustain drinking water supplies, provide hydro-power and dilute industrial and municipal waste while maintaining aquatic ecosystem integrity. Expansion of urban areas will locally reduce ET and increase runoff, but intensification of agriculture, biofuel crops, and silvicultural practices may increase ET and reduce runoff. These alterations in ET, runoff and water supply will be even more complicated by climate change and sea level rise, requiring iterative and complex modeling and integrative management efforts to meet increasing demands for water-related ecosystem services.

Our ability to measure, calculate, and model ET is not only resource intensive, but also technically and practically challenging. ET is influenced by parameters that vary across multiple scales – from site-specific variables such as soil, vegetation type, and localized weather conditions, across the spatial heterogeneity of land use management at the landscape scales, to regional scales influenced by broad climatic conditions.

This symposium will bring together scientists, engineers, students, and technical experts exploring state-of-the-art knowledge and technology to monitor and model ET at multiple temporal and spatial scales with those studying and interested in the environmental effects of changes in land use and management, vegetation, and climate.

The uniqueness of this conference is due to the focus on ET processes and feedback mechanisms, technology, and environmental impacts on forests and agriculture. Topics extend across scales to encompass mechanistic and modeled flow of water through the soil plant atmosphere continuum, interactions with land use patterns, and the resultant impacts upon environmental and societal services.

The conference will be held April 7-11, 2014 in the historic city of Raleigh in North Carolina, USA. Raleigh is a rapidly growing, high-tech metropolitan city, located 3 hours from the Atlantic coast in the east, 4 hours from the Appalachian Mountains in the west, and surrounded by productive agricultural and forest lands. This location epitomizes the challenges faced by land use intensification and change along with climate change.

HOW TO SUBMIT YOUR PROPOSAL

All presentation proposals are to be submitted via online submissions. NO FAX OR REGULAR MAIL SUBMISSIONS WILL BE ACCEPTED.

1. Go to the website: <http://et2014.abstractcentral.com>
2. New users should read the instructions and then proceed to Create an Account.
3. The new User ID and password that you create will be needed to log into the site after your account is created. (Suggested password is your email address followed by underlineET2014 and password ET2014.)
4. Once your login is established you will receive email notification of your login and password. Login to <http://et2014.abstractcentral.com>
5. Request a submission role and then you will be able to submit your abstract by clicking on "Submission" tab.
6. Once submitted, you will receive notification that your abstract was received.
7. **EDITING DEADLINE:** February 1, 2014 at 11:59PM EST. Each author is able to log into the system using their login and password to make edits to their submission. Instructions: select the abstract you wish to edit and select "edit". Once the edits are made you need to select "submit" at the bottom of the screen for your abstract to be replaced and included in the subject area you originally submitted to.
8. **NOTIFICATION:** Notifications of acceptance into the program will be emailed by October 1, 2013. If you do not receive your notification by October 15 please contact Sharon McKnight at ASABE.

SUBMISSION OR MEETING QUESTIONS: If you have questions regarding the submission criteria or questions about the meeting, please contact Sharon McKnight

SESSION TYPES

The meeting will include both Lecture Sessions and Poster Sessions. Presentations will be chosen for lecture sessions if the organizers believe that format is most appropriate for the session topic and/or subject matter. A poster presentation will be used where the range of session topics and/or subject is exceeded or somewhat related lending itself to this particular format.

LECTURE SESSIONS

- Oral presentations are generally limited in time with a short period for questions and answers. (20 minutes maximum)
- Rooms are equipped with a computer, LCD projector, screen and microphone.





SPECIAL SESSIONS/REGISTRATION/NOTES TO AUTHORS

POSTER SESSIONS

- Board Dimensions: 4 foot deep by 8 foot wide (maximum). Recommended 3'10" x 7'10" usable space.
 - Poster presentations offer maximum opportunity for direct interaction between the presenter and the audience as well as overall professional exposure for the author. Posters will be placed on the poster boards 15 minutes prior to the beginning of the 2.5 hour session and removed 15 minutes after the session. Those posters not removed will be disposed of. Poster session presenters are expected to be available during the poster session to discuss their work.
- Acceptance of your proposal: If your paper is accepted, the Session Organizer will send notification.
- International Authors, Presenters, and Lecturers: ASABE recommends that you initiate your visa application process at least four to six months prior to the opening date of any ASABE conference or meeting.

Paper Number Assignments: Paper numbers are assigned upon submission of abstract.

Registration: You must register for the "Evapotranspiration: Challenges in Measurement and Modeling from Leaf to the Landscape Scale and Beyond Conference" for your paper to be included in the printed program, itinerary builder and ASABE Technical Library. No exceptions.

If a coauthor will be making the presentation, it is the responsibility of the author to notify the session moderator and ASABE by February 1, 2014. No additional changes will be made after this date.

ADDITIONAL NOTES TO AUTHORS

1. All oral and poster presentations will be available on the ASABE technical library after the Conference. The technical library will contain only those papers or posters presented at the Conference.
2. Instructions and template for preparing manuscripts can be found at <http://www.asabe.org/publications/authors/manuscript-templates.aspx> and select Conference Paper Template.
3. Authors must register for the conference and pay the registration fee prior to February 1, 2014 or presentation will not be included in the program.
4. Funding is not available from ASABE or the Conference for presenter participation. Presenters will be required to pay all their costs including the meeting registration fee. ASABE will give all accepted presenters the opportunity to register at the ASABE member rates. Deadline for Full Paper Presentation submission is February 1, 2014.
5. Presentations from authors who fail to register for the conference will be removed from the program on February 1. All changes to

presentation titles, coauthors or cancellations must be made by this date. NO EXCEPTIONS. No further program changes will be made after February 1, 2014. The final individual numbering of the poster sessions will be completed.

6. A visa and passport may be required of international presenters to facilitate travel 4 to 6 months prior to the scheduled date of the annual meeting. For more information regarding visas visit <http://www.asabemeetings.org>

7. The official language of the conference will be English. change.

SPECIAL ISSUE PUBLICATION:

All accepted/presented abstracts/extended abstracts/papers (6-page limit) will be published in proceedings and distributed at the Symposium. Authors of selected papers will later be invited to submit a manuscript for a possible publication in a special issue of a relevant peer-reviewed journal.

Details of the Symposium can be found at: www.asabe.org

ASABE 2014 ET Symposium Planning Committee Members

- Devendra Amatya, PhD, PE - USDA Forest Service, SC – Symposium Co-Chair
- Jami Nettles, PhD - Weyerhaeuser Company, MS - Symposium Co-Chair
- Ge Sun, PhD - USDA Forest Service, NC - Technical Program Co-Chair
- Suat Irmak, Ph.D. - University of Nebraska-Lincoln, NE – Technical Program Co-Chair
- Sharon McKnight – American Society of Agricultural & Biological Engineers (ASABE), MI- Director of Meetings
- Patricia Matteson – USDA Forest Service, NC – Communications/Outreach Representative
- Anand Jayakaran, PhD – Clemson University, SC
- Caroline Norrant Romand, PhD - Université Lille 1, France
- Cole Green Rossi, PhD - USDOI Bureau of Land Management, CO
- David Sumner, PhD – US Geological Survey, FL
- George Chescheir, PhD, PE - North Carolina State University, NC
- Giancarlo Dalla Fontana, PhD - University of Padova, Italy
- Herbert Ssegane, PhD - University of Georgia, GA
- Jeffrey M Warren, PhD - Oak Ridge National Laboratory, TN
- Melanie Zeppel, PhD - Macquarie University, Australia
- Osvaldo M.R. Cabral, PhD - Embrapa Meio Ambiente, Brazil
- Prasanna H. Gowda, PhD., MBA - USDA-Agricultural research Service, TX
- Rhett Jackson, PhD - University of Georgia, GA
- Shenggong Li, PhD - Chinese Academy of Sciences, China
- Sudhanshu Panda, PhD - University of North Georgia, GA
- Sukanta Basu, PhD – North Carolina State University, NC
- Thomas W. Ley, PhD, PE - Colorado Division of Water Resources, CO
- Timothy Callahan, PhD – College of Charleston, SC
- Zhiqiang Zhang, PhD - Beijing Forestry University, China
- Zhiqiu Gao, PhD – Nanjing University, China